

NAFORSHCHIKOV, V.P.; KROPACHEV, A.M.

Composition of iron ores in the Glazov syneclyse. Geol. rud.  
mestorosh. 6 no.2:116-118 Mr-Ap '64. (MIRA 17:6)

1. Permskiy politekhnicheskly institut, kafedra geologii.

KROPATIN, A.M.

Geochemical inheritance of the Lower Permian basins of the cise-Ural region trough. Dokl. AN SSSR 159 no.1:111-113 N '64.  
(MIRA 17:12)

I. Permskiy gosudarstvennyy universitet im. A.M. Gor'kogo.  
Predstavlenie akademikom N.M. Strakhovym.

KROPACHEV, Aleksandr Mikhaylovich, prof.; NEYMAN, M.I., red.

[Pneumonia in children; treatment, care, prevention]  
Vospalenie legkikh u detei; lechenie, ukhod, preduprezh-  
denie. Moskva, Meditsina, 1965. 25 p. (MIRA 18:7)

KROPACHEV, A.M.; KROPACHEVA, T.S.; KHURSIK, V.Z.

Minor (accessory) elements in the halites of the Solikamsk and  
Yuryuzan'-Sylva Depressions. Sov. geol. 8 no.8:157-159 Ag '65.  
(MIRA 18:10)

1. Permskiy gosudarstvennyy universitet im. A.M.Gor'kogo i  
Permskiy politekhnicheskiy institut.

KROPACHEV, Aleksandr Mikhaylovich, Klinicheskaya obshchiye PNEUMONIY,  
A.N., kand. med. nauk; DMIT'YE, N.A., red.

[Chronic pneumonias in children] Khronicheskie pnevmonii  
u detei. Leningrad, Med'itsina, 1965. 222 p.  
(MIRA 18:10)

1. Kafedra rentgenologii Saratovskogo meditsinskogo instituta (fer Protopopov).

KROPACHEV, A.M., prof.; PROTOPOPOV, A.N., dotsent; MLOVANOV, A.Ye.

Chronic diffuse interstitial pulmonary fibrosis in children.  
Vest. rent. i rad. 40 no.6:34-37 N-D '65.

(MIRA 19:1)

1. Kafedra propedevtiki detskikh bolezney (nauchnyy rukovoditel' -  
prof. A.M. Kropachev) i kafedra rentgenologii i radiologii (zav. -  
prof. V.N. Shtern) Saratovskogo meditsinskogo instituta.

ACCESSION NR: APL031641

S/0203/64/004/002/0362/0371

AUTHOR: Kropachev, E. P.

TITLE: A mechanism of exciting a steady magnetic field in a spherical conductor

SOURCE: Geomagnetizm i aeronomiya, v. 4, no. 2, 1964, 362-371

TOPIC TAGS: steady magnetic field, spherical conductor, geomagnetic field, eddy current, toroidal field, poloidal field

ABSTRACT: The dynamo theory may explain the origin of the earth's magnetic field by hydrodynamic movements of an electrically conducting core. The author is concerned with the special case of maintaining a moving steady magnetic field that does not change with time. He has investigated a model of a spherical conductor, the inner part of which rotates relative to the outer part with a definite angular velocity. In the outer part of the conductor an appreciable concentration of rotating elements (eddies) is introduced with their angular velocities directed along the meridians of the spherical conductor. The capacity of the eddies to acquire magnetic moment in the outer field is used for converting the toroidal field to a poloidal field in the outer part of the conductor. Conditions are

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defined under which a steady magnetic field may be produced both within the conductor and outside it. The conversion of fields described in this paper has already been used by others to explain the nondipole component and the secular course of the geomagnetic field. From this work it follows that the principles may be applied to the earth if it becomes possible to introduce a proper velocity field into the core of the earth from dynamic considerations. Orig. art. has: 3 figures, 7 tables, and 31 formulas.

ASSOCIATION: Institut zemnogo magnetizma, ionosfery i rasprostraneniya radiovoln  
(Institute of Terrestrial Magnetism, the Ionosphere, and Propagation of Radio Waves)

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Card 2/2

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ACC NR: AP7U01069

SOURCE CODE: UR/0203/66/006/001/0175/0179

39  
B

AUTHOR: Kropachev, E. P.

ORG: Leningrad Department, Institute of Terrestrial Magnetism, Ionosphere and  
Radic Wave Propagation, AN SSSR (Institut zemnogo magnetizma, ionosfery i  
rasprostraneniya radiovoln AN SSSR, Leningradskoye otdeleniye)

TITLE: Electromagnetic induction in a rotating sphere

SOURCE: Geomagnetizm i aeronomiya, v. 6, no. 1, 1966, 175-179

TOPIC TAGS: geomagnetic field, electromagnetic field

ABSTRACT: In previous studies the problem of electromagnetic induction in a rotating sphere, with very broad assumptions on the external field and the angular velocity of the sphere, was considered in detail and a solution was obtained for the problem of induction in a conducting sphere rotating in a transverse field. Such solutions are valuable in developing a theory of secular variations of the geomagnetic field and in formulating models of the earth's general field. The problem of induction in a transverse field already has been solved for a stationary rotating sphere. This solution (E. S. Bullard, Proc. Roy. Soc., London, 1949, A199, 413) served as the basis for the paper cited below, which gives the solution of the nonstationary problem. Orig. art. has: 1 figure and 17 formulas. [JPRS: 35,809]

SUB CODE: 20, 08 / SUBM DATE: 01Mar65 / ORIG REF: 002

Card 1/1 vmb

UDC: 550.388.2

09270092

UR0203/66/006/003/0548/0555  
ACC NR: AP7003074

SOURCE CODE: UR/0203/66/006/003/0548/0555

23

AUTHOR: Kromachev, E. P.

C.I.S.: Leningrad Section, Institute of Terrestrial Magnetism, Ionosphere and Radio Wave Propagation, AN SSSR (Institut zemnogo magnitizma, ionosfery i rasprostraneniya radiovoln AN SSSR; Leningradskoye otdeleniye)

TITLE: Magnetic field generation near the boundary of a conductor

SOURCE: Geomagnetizm i aeronomiya, v. 6, no. 3, 1966, 548-555

TOPIC TAGS: space magnetic field, sunspot

ABSTRACT: The author considers the case of a sphere rotating in a conducting medium near the boundary; sphere and medium have the same conductivity. The vector of angular velocity of the sphere is perpendicular to the normal to the boundary. It is shown that in the case of a definite velocity of rotation there can be generation of a stationary electromagnetic field; this is of interest for the dynamo theory of the origin of magnetic fields in space. The proposed mechanism of magnetic field generation, in contrast to traditional mechanisms of excitation of the field, has a local character. The field excitation does not require general circulation of matter. The mechanism can be used in the theory of the magnetic fields of sunspots. The proposed mechanism is ineffective for the dynamo theory of terrestrial magnetism, however, because it requires excessively large Reynolds magnetic numbers --  $10^5$ - $10^6$ .

Orig. art. has: 1 figure and 26 formulas. [JPM: 37,710]

SUB CODE: 20, 03 / SUIM DATE: 23Sep65 / ORIG REF: 004 / OTH REF: 003

UDC: 550.382

Card 1/1

1. KROPACHEV, G. P., Docent
2. USSR (600)
4. Electric Motors, Synchronous
7. Obtaining reactance energy from synchronous motors for the purpose of increasing the capacity coefficient of an enterprise. Prom.energ. 9 No. 11, 1952.
9. Monthly List of Russian Accessions, Library of Congress, January 1953. Unclassified.

KROPACHEV, G. P.

KROPACHEV, G. P. Getting Reactive Power from Synchronous Motors to Improve Power Factor in Industry. (Polucheniye Reaktivnoy Energii ot Sinkhronnykh Dvigateley dlya Povysheniya Koeffitsienta Moshchnosti Predpriyatiy), pp. 11-13

The use of synchronous motors in low-voltage industrial circuits is recommended and a successful application of an APNT type motor in such circuits is described. (Graphs, formulae, table and bibliography).

SO: PROMYSHLENNAYA ENERGETIKA, No. 10, Oct. 1952, Moscow (1502270)

REZIN, M.G.; KROPACHEV, G.P.; BURDE, L.V.; SERGEYEV, S.V.; SEMENOV, O.F.;  
OSYKHOVSKII, T.G.; DROBININ, Ya.I.; KOCHNEV, E.K.; MILAYKINA, R.N.  
PARAMONOVA, Ye.I.; LIKHACHEV, M.N.[deceased].

"Electric engineering." A.S. Kasatkin, M.A. Perekalin. Reviewed by M. G.  
Resin and others. Elektricheskoe no.7:94-95 Jl '57. (MLRA 10:8)  
(Electric engineering)  
(Kasatkin, A.S.) (Perekalin, M.A.)

KROPACHEV, G. P.

"Investigation of an Asynchronous Starter in Synchronous Machines with Salient Poles and Without Starter Cage." Official opponents: N. S. Siunov, Professor, Doctor of Technical Sciences, S. A. Volotkovskiy, Doctor of Technical Sciences and M. A. Pirumyan, Docent.

Dissertation for the Degree of Candidate of Technical Sciences, Ural Polytechnic Institute imeni Kir'ev, ~~1949-1954~~, Elektrichestvo, 1958, Nr 5, pp. 91-92 (USSR.)

30 June 1958

KROPACHEV, G.P., dotsent, kand. tekhn. nauk; REZIN, M.G., dotsent, kand. tekhn. nauk; DROBININ, Ya.I., assistant; GOLUBOV, N.S., assistant; PANYAZ'KOVA, V.P., assistant; KOCHNEV, E.K., starshiy prepodavatel'

Electromagnetic stirring and pumping over of molten steel.  
Sbor. nauch. trud. Ural. politekh. inst. no.122:226-233 '61.  
(MIRA 17:12)

REZIN, M.G., kand.tekhn.nauk, dotsent; KROPACHEV, G.P., kand.tekhn.nauk,  
dotsent; DROBININ, Ya.I., inzh.; KOCHNEV, E.K., inzh.;  
GOLUBEV, N.S., inzh.; MASHKAUTSAN, V.V., inzh.

"Physical and mathematical principles of magnetic transportation  
of molten metals" by G.A. Ostroumov. Reviewed by M.G. Rezin and  
others. Elektrichestvo no.7:91-93 Jl '62. (MIRA 15:7)

(Liquid metals)  
(Ostroumov, G.A.)

DOKSHITSKAYA, A.I.; KROPACHEV, G.P.; Prinimal uchastiye DROBININ, D.N., dotsent

Technical and economic advantages in applying the method of electro-magnetic stirring in electric steel smelting furnaces. Trudy Ural. politekh. inst. no.133:7-10 '63. (MIRA 17:9)

TOPIC FADS: electromagnetic mixing

TRANSLATION: At the Ural Polytechnic Institute are conducted investigations, ex-  
periments, on the use of electromagnetic mixing of liquid metal in ladles. Statute  
which substantially increases the speed and

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SHABASHOV, A.P., kand. tekhn. nauk; KHRISANOV, M.I., kand. tekhn. nauk; KROPACHEV, G.P., kand. tekhn. nauk; KONYUKHOV, S.M., inzh., ~~Fetisenzent~~; SUSTAVOV, M.I., inzh., red.; ZYUZIN, N.M., red. ixd.-va; MODEL', B.I., tekhn. red.

[Electric cranes] Elektricheskie podemnye krany. Moskva, Mashgiz, 1964. 259 p. (MIRA 17:3)

3 (9)

AUTHORS: Bogdanova, A. K., Kropachev, L. N. SOV/50-59- -4/21TITLE: Off-shore and On-shore Wind Tide and Its Importance  
for the Hydrological Conditions of the Black Sea (Sgonno-  
nagonnaya tsirkulyatsiya i yeye rol' v gidrologicheskem  
rezhime Chernogo morya)

PERIODICAL: Meteorologiya i hidrologiya, 1959, Nr 4, pp 25-33 (USSR)

ABSTRACT: The off-shore and on-shore wind tides of the  
water on the coasts express themselves clearly by the intense  
level variations in shoal-water bays, or by the rapid fall of  
water temperature on steep shores. The first steps in  
setting up the theory of wind-tide and wind-backtide phenomena  
(sgonno-nagonnaya yavleniye) were made by Ekman. Later on,  
this theory was further developed by V. V. Shuleykin. - On  
the Black-Sea coast of the USSR, wind tides are observed at  
winds in the western half of the horizon. The south winds  
cause drift currents and wind tides, particularly in the  
western half of the Black Sea, whereas the west winds cause  
the propagation of wind tides along the whole north shore.  
The authors have often observed wind tides and wind backtides  
on the whole coast from Odessa to Batumi. They give here the

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Off-shore and On-shore Wind Tide and Its COV/50-59-4-4/21  
Importance for the Hydrological Conditions of the Black Sea

observations of August 1917 and June 1919. These observations prove the simultaneous propagation of the backtides along the whole Black-Sea coast with the formation of eddies of current with an anticyclonic rational system, but at the same time point out the great stability and life of the same. The longest backtides are found at the end of spring when the branch of the Siberian anticyclone slackens and moves towards the east, while the Mediterranean cyclones get a free outlet over the Black Sea to the south of the European part of the USSR. From 1936-40 and from 1946-56, between 2 and 4 extensive and long-lasting backtides were observed on an average each summer. The rules ascertained in the observations refer to small current rings. The small current eddies unsteady in time are accompanied by a transverse circulation and lead to a rapid redistribution of the water masses. The more intense the cyclonic current is, the higher rise the stable layers of the thermocline and of the halocline in the rotational center. A rise of the density boundary surface, a reduction of its thickness, and an increase in the density gradient in the layer are usually observed in the wind backtide areas.

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Off-shore and On-shore Wind Tide and its SCV/SC-59-4 1/21  
Importance for the Hydrological Conditions of the Black Sea

And vice versa, a decrease of the thermocline and of the cold intermediate layer with a simultaneous increase in the thickness of these layers and a decrease of the temperature gradient and of the salt content in the same, are generally found in the centers of anticyclonic currents, in the wind-tide areas. - The rise and fall of the water on the coasts and in the centers of the cyclonic and anticyclonic current eddies during the time of evolution of the wind-tide and wind-backtide currents and at the moment of the current change belong to the most important factors of the vertical exchange of water in the upper 150-200 m layer of the Black Sea. The deep waters rise to the surface, are heated by the sun and desalinated by the afflux of fresh water from the rivers, thus decreasing in density, and not being able to sink down to their former depth after the end of the backtide. Deeper layers rise in the following wind backtides. In winter, this deep water reaching the surface is intensely cooled, becomes more salty and sinks down to a deeper horizon (than it had risen from) after the end of the wind backtide. This explains why in the central and south-east parts of the Black Sea the water temperature

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Off-shore and On-shore Wind Tide and Its  
Importance for the Hydrological Conditions of the Black Sea

SOV/50-59-4-4/21

in the depth of the cold intermediate layer is often lower  
than the lowest temperature on the surface of the sea in  
winter. There are 3 figures and 19 Soviet references.

Card 4/4

KROPACHEV, L.N.

Methods for numerical forecasting of dangerous level lifts in the  
Sea of Azov. Trudy Okean.kom. 7:136-147 '60. (MIRA 13:7)

1. Gidrometeorologicheskaya observatoriya Chernogo i Azovskogo  
morey.  
(Azov, Sea of--Hydrology)

—KROPACHEV, L.N.; BOGDANOVA, A.X.

Level fluctuations of the Sea of Azov. Meteor. i gidrol. no.10;  
19-26 O '60. (MIRA 13:10)  
(Azov, Sea of--Hydrology)

KROPACHEV, L.N.; SHAYTAN, O.I.

Some characteristics of sea level fluctuations in the Kerch Strait.  
Okeanologiya 1 no.5:837-845 '61. (MIRA 15:3)

1. Gidrometeorologicheskaya observatoriya Chernogo i Azovskogo  
morey Upravleniya gidrometeorologicheskoy sluzhby USSR.  
(Kerch Strait--Hydrography)

ROZHKOV, L.P.; KROPACHEV, L.N.

Oceanographic research in the Black Sea. Mezhdunar.geofiz.  
god no.3:109-116 '61. (MIRA 14:10)

1. Hydrological Observatory of the Black and Azov Seas.  
(Black Sea--Oceanographic research)

KROPACHEV, L.N.; BOGDANOVA, A.K.

Significance of winds in the Black Sea in the proper organization  
and operation of seaside resorts. Vop.kur., fizioter.i lech.fiz.  
kul't. 27 no.2:159-162 Mr-Ap '62. (MIRA 15:11)

1. Iz gidrometeorologicheskoy observatorii Chernogo i Azovskogo  
morey v Sevastopole.  
(BLACK SEA--SEASIDE RESORTS) (BLACK SEA--WINDS)

CHERNYSHEV, M.P.; ROZHKOVA, L.P.; SHUL'GINA, Ye.F.; IGNATOVICH, A.F.;  
LABUNSKAYA, L.S.; FOMINA, T.V.; CHERNYAKOVA, A.P.; SHPAKOVA,  
L.N.; TARASOVA, M.K.; ANFILATOVA, A.I.; SLAVIN, L.B.;  
BARYSHEVSKAYA, G.I.; DERIGLAZOVA, N.V.; MATUSHEVSKIY, G.V.;  
AL'TMAN, E.N.; KROPACHEV, L.N.; CHEREDELOV, B.F.; POTAPOV,  
A.T.; DUDCHIK, M.K.; REGENTOVSKIY, V.S.; YERMAKOVA, L.P.;  
SEMENOVA, Ye.A.; KULIKOVSKIY, I.I.; KIRYUKHIN, V.G.; AKSENOV,  
A.A., red.; NEDOSHIVINA, T.G., red.; SERGEYEV, A.N., tekhn.  
red.; BRAYNINA, M.I., tekhn. red.

[Hydrometeorological handbook of the Sea of Azov] Gidrometeoro-  
logicheskii spravochnik Azovskogo moria. Pod red. A.A. Aksanova.  
Leningrad, Gidrometeoizdat, 1962. 855 p. (MIRA 16:7)

1. Gidrometeorologicheskaya observatoriya Chernogo i Azovskogo  
morey.

(Azov, Sea of--Hydrometeorology)

KROPACHEV, L.N.

Characteristics of the level regime of the Sea of Azov.  
Sbor. rab. GMD CHAM no.1:34-52 '62. (MIRA 17:5)

AL'TMAN, E.N.; IL'IN, Yu.V.; KROPACHEV, L.N.

Hydrometeorological conditions on the Black Sea during the IGY.  
Sbor. rab. OMO CHAM no.2:44-64 '64.

(MIRA 18:2)

REF ID: A 74

USSR/Cultivated Plants - Fodders.

H-6

Abs Jour : Ref Zbir - Biol., No 9, 1956, 59352

Author : Krupachey, L.P.

Inst : -

Title : Perennial Grasses in Kazakhstan Oblast.

Orig pub : Leningrad, 1957, No 3, 35-66

Abstract : An example of productive farms of Central Kazakhstan shows the possibility of growing perennial grasses crops, which exceeds by some 5-7 times the yields of natural herbes under conditions of dry farming. The most productive grass mixtures here are: sheep grass - sainfoin. Alfalfa is less drought resistant and it should be used in sectors where ground water is close to the surface. --  
G.N. Chernov

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KROPACHEV, N.G.; POPOV, K.A.

Transition to business accounting methods at the Kuznetsk Plant.  
Stal' 16 no.5:452-459 My '56. (MIRA 9:8)

1. Kuznetskiy metallurgicheskiy kombinat.  
(Kuznetsk--Metallurgical plants)

KOSAR', A.V., red.; VOLOSHIN, A.N., red.; GURKOVICH, R.V., red.; KROPACHEV, N.G., red.; PARENCHENKO, N.S., red.; PLEKHANOV, P.S., red.; SUSKOV, I.A., red.; SHAROV, G.V., red.; OGAREV, A.P., tekhn.red.

[First in Siberian metallurgy] Pervenets Sibirskoi metallurgii.  
Kemerovskoe knizhnoe izd-vo, 1957. 289 p. (MIRA 12:4)

1. Sekretar' partkoma Kuznetskogo kombinata (for Parenchenko).
2. Nachal'nik tekhnicheskogo otdela Kuznetskogo kombinata (for Sharov).  
(Kuznetsk Basin--Metallurgical plants)

KROPACHEV, N.G.; POPOV, D.I.

Efficient utilization of potentialities in open-hearth furnace  
plants. Stal' 21 no.9:846-849 S '61. (MIRA 14:9)

1. Kuznetskiy metallurgicheskiy kombinat i Tsentral'nyy nauchno-issledovatel'skiy institut chernoy metallurgii.  
(Open-hearth furnaces—Accounting)

KROPACHEV, N.G.

Work of the Public Bureau of Economic Analysis at the Kuznetsk  
Metallurgical combine. Izv. vys. ucheb. zav.; Chern. met. 8 no.2:  
204 '65. (MIRA 18:2)

SACHKO, N.S., kand. ekonomicheskikh nauk, dozent; BUKACHEV, N.G., inzh.;  
ZOLUBIK, E.L., inzh.

Operational calculation and analysis of production costs for the  
by-product coke industry and blast furnace practices at the Kuznetsk  
Metallurgical Combine. Stal' 25 no.8:856-858 S '65. (MIRA 18:9)

1. Kuznetskiy metallurgicheskiy kombinat i Sibirskiy metallurgicheskiy  
institut.

KROPACHEV, N.G., inzh.; GOL'DER, E.L., inzh.

Operational accounting and analysis of production cost in  
steel foundries and rolling mills of the Kuznetsk Metallurgical  
Combine. Stal' 25 no.10:953-955 0 '65. (MIRA 18:11)

1. Kuznetskiy metallurgicheskiy kombinat.

BOGANZEN, Bodo Germanovich, prof.; KHOKHLOV, V.A., zasl. deyatel' nauki RSR, doktor geol.-miner. nauk, prof., red.; KROPACHEV, S.A., red.; YELEGECHEV, I.Z., red.

[Nature of Tomsk Province] Priroda Tomskoi oblasti. Tomsk,  
Izd. 3., perer. i dop. Tomskoe knizhnoe izd-vo, 1963. 233 p.  
(MIRA 17:6)

DEMIN, A.M., KROPACHEV, S.M., KRUT', I.V.

Devonian volcanic complex of the Northern Caucasus. Izv. AN SSSR.  
Ser. geol. 30 no.11:47-62 N '65.

(MIRA 18:12)

1. Nauchno-issledovatel'skaya stantsiya Moskovskogo gosudarstven-  
nogo universiteta M.V.Lomonosova. Submitted June 30, 1964.

DEMIN, A.M.; KROPACHEV, S.M.

Stratigraphic significance of conglomerates with plagiogranite  
pebbles in Paleozoic layers of the Northern Caucasus. Izv.  
AN SSSR. Ser. geol. 28 no.7:69-79 Jl '63. (MIRA 16:12)

1. Moskovskiy gosudarstvennyy universitet imeni Lomonosova,  
Moskva.

KROPACHEV, S.M.; KRUT', I.V.

Stratigraphy of Middle Paleozoic sediments in the Northern  
Caucasus. Dokl. AN SSSR 153 no.1:172-175 N '63.

(MIRA 17:1)

1. Moskovskiy gosudarstvennyy universitet im. M.V. Lomonosova.  
Predstavлено академиком V.I. Smirnovym.

KRUT', I.V.; YAKOVLEV, L.I.; KROPACHEV, S.M.; LYASHENKO, A.I.;  
SHARKOVA, T.T.

Stratigraphic position and structure of the Karashay series  
in the Northern Caucasus. Izv. AN SSSR. Ser. geol. 28 no.10:  
49-59 0 '63. (MIRA 16:11)

1. Tsentral'nyy nauchno-issledovatel'skiy geologorazvedochnyy  
institut, Moskva.

BELOV, A.A.; DOLGINOV, Ye.A.; KROPACHEV, S.M.; ORLOV, R. Yu.; SOKOLOV, B.A.

Cherkessk-Kelazuri lateral disturbance of the structure of the  
Greater Caucasus. Izv. AN SSSR. Ser. geol. 24 no.6:24-32 Je '60.

(MIRA 14:4)

1. Moskovskiy gosudarstvennyy universitet.  
(Caucasus—Geology, Structural)

DEM'IN, A.M.; KROPACHEV, S.M.

Paleozoic history of igneous activity in the W-Stern Caucasus.  
Vest. Mosk. un. Ser. 4: Geol. 20 no.3:46-54. Mj-Je 1965.  
(MERA 18:7)  
1. Kafedra petrografii Moskovskogo universiteta.

KROPACHEV, S.M.

Middle Devonian limestone klippen in lower Carboniferous  
clay shales on the Marukha River (Northern Caucasus). Dokl.  
AN SSSR 139 no.5:1190-1193 Ag<sub>4</sub> '61. (MIRA 14:8)

1. Moskovskiy gosudarstvennyy universitet im. M.V. Lomonosova.  
Predstavлено академиком A.L. Yanshinyem.  
(Marukha Valley—Geology, Structural)

KROPACHEV, V.; DMITRENKO, V., starshiy inzh.

Modernization of the gantry crane "Gants." Rech. transp. 21  
no.3:13-15 Mr '62. (MIRA 15:4)

1. Nachal'nik otdela mekhanizatsii portaimeni Lenina, Dneprovskogo  
basseyna (for Kropachev). 2. Otdel mekhanizatsii porta imeni  
Lenina Dneprovskogo basseyna (for Dmitrenko).  
(Cranes, derricks, etc.)

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KROPACHEV, V.A. (Moskva)

Changes of blood gases in patients with disorders of bronchial patency under the influence of broncholytic substances. Klin.med. 38 no.10 71-75 0 '60. (MIRA 13:11)

1. Iz 2-y kafedry terapii (sav. - prof. B.Ye. Votchal) TSentral'-nogo instituta usovershenstvovaniya vrachey na base klinicheskoy bol'nitsy imeni Botkina (glavnyy vrach - prof. A.N. Shabanov) (LUNGS—DISEASES) (BRONCHI—DISEASES) (BLOOD, GASES IN)

KROPACHEV, V. A.

USSR/Chemistry - Ketones  
Chemistry - Hydrogenation

Apr 46

"Studies in the Field of -Keto-oxides: II, Obtaining of and Hydration of Oxides of Tri-Butyl-Styryl-Ketone," T. I. Temnikova, V. A. Kropachev, Chair of Constr of Org Compounds, Leningrad Order of Lenin State u, 7 1/4 pp

"Zhur Obshch Khim" Vol XVIII (LXXX), No 4

The cis-and trans- forms of this oxide with melting point 70 - 71 and 80 - 81, respectively, were obtained as two different isomers:  $C_6H_5CHO + (CH_3)_3COCH_2Br \rightleftharpoons C_6H_5CH=CHCOOC(CH_3)_3 + NaBr + CH_3OH$ . In both cases phenyl trimethylacetyl ethylene glycol was obtained by hydration with sulfuric acid. The oxide could not be hydrogenated in the presence of platinum black, but in the presence of palladium on nickel, benzyl trimethyl acetyl carbinol was obtained. Submitted 24 Mar 1947

PA 8/49 T44

***a*-Keto oxides.** III. Selectivity of hydrogenation of benzylidenecetoxone oxide in the presence of platinum and palladium. T. I. Temnikova and V. A. Kropachev (Leningrad State Univ.), *Zhur. Otschekh Khim.* (J. Gen. Chem.) 19, 2030-81 (1949); cf. *C.A.* 43, 130c. Hydrogenation of benzylidenecetoxone oxide in EtOH or Et<sub>2</sub>O with Ni-Pd at room temp. yields 80%  $\text{Pb}(\text{CH}_2\text{CH}(\text{OH})\text{C}(\text{OH})\text{Me})_2$ , bp 96°,  $\text{d}^{20}_4$  1.0453,  $\text{m.p.}$  1.52403; *tert*-butyloxone, m. 100-70° (from RtoID); *phenylidenone*, m. 171-3° (from RtoOH). Treatment of the keto alk. with PhMgBr gave  $\text{Pb}(\text{CH}_2\text{CH}(\text{OH})\text{C}(\text{OH})\text{Me})_2$ , m. 108.5-9.5° (from EtOH). Hydrogenation of the oxide over Ni-Pt yields  $\text{O}(\text{CHPh}_2)\text{CH}(\text{OH})\text{Me}$  described earlier (*C.A.* 40, 4004). Arguments are presented for classifying the adm. of ales. to olefin oxides as nucleophilic reactions which may be modified by preliminary deformation of the oxide ring by acids.

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000826630001-5"

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10

*<sup>n</sup>-Keto aldehydes. IV. Hydrogenation of *n*-keto aldehydes as a method of preparation of *n*-keto alcohols.* I. I. Ternovskaya and V. A. Kostylev (A. A. Zhukovsky State Univ., Leningrad) Zhur. Vsesoyuz. Khim. i Khim. Tekhnol. 1951, 16(10), 1011 (C.A. 44, 7271). The previously proposed hydrogenation of *n*-ketin under over Pt-Ni is a generally applicable method for addition of 2 H, after which the reaction stops. Almost no addition of H occurs with iso-Pr-styryl ketone oxide over Pt black. Addn. of 14.5 g. iso-PrCOCl to  $\text{CH}_2\text{N}_2$  in  $\text{Et}_2\text{O}$ , followed by passage of HBr at 0°, gave 74% *trans*-*n*-*propyl-2-phenyl-3-hydroxy-4-penten-2-one*, m.p. 67°, nD<sub>20</sub> 1.4675. This (15.7 g.) and 13.9 g. Ba(OH)<sub>2</sub> in 10 ml. MeOH slowly treated at 57° with 2.15 g. Na in 50 ml. MeOH, stirred 1 hr., and treated with dil.  $\text{AcOH}$ , gave 65% of *2-phenyl-3-hydroxy-4-penten-2-one*, m.p. 110.5-117.5°, nD<sub>20</sub> 1.5104 (dilutes solution from  $\text{AcOH}$ -K<sub>2</sub>CO<sub>3</sub>, does not yield  $\text{CH}_2$  with  $\text{MeMgCl}$ ), reduces Pechlin anil only on heating; *trans*-*acetone*, m.p. 77.80° (from MeOH), 137.40° (on rapid heating in sealed tube) (from  $\text{Et}_2\text{O}$ ). Hydrogenation over Pt black did not proceed at normal conditions. Hydrogenation over Pd-Ni catalyst (by reduction of  $\text{PdCl}_2\text{2NaCl}$  and  $\text{Ni}$ ; cf. previous papers) gave the keto alde.,  $\text{PdCH}_2\text{CH(OH)-C}_6\text{H}_5\text{CO}_2\text{Me}$ , b.p. 125°, d<sub>4</sub><sup>20</sup> 1.013, nD<sub>20</sub> 1.5100, *trans*-*acetone*, m.p. 100.5-7.5° (from dil. MeOH); neither the *p*-nitrophenyl-hydrazone nor oxime could be made. The keto alde. (1.95 g.) with  $\text{PhMgBr}$  readily gave 80% *2,2-dimethyl-3-phenyl-3,6-pentaenol*, needles, m.p. 101.5-2.5° (from petr. ether), which on oxidation with  $\text{Pb(OAc)}_4$  gave iso- $\text{PbCO}_2\text{Me}$ , and  $\text{BaOII}$ . Similar hydrogenation of *Et* styryl ketone oxide gave 70-84% *benzyl-2-phenylcarbinol*, b.p. 110-115°, d<sub>4</sub><sup>20</sup> 1.0019, nD<sub>20</sub> 1.51650 (*trans*-*acetone*, m.p. 149-0.5° (from  $\text{Et}_2\text{O}$ )), which with  $\text{PhMgBr}$  gave 70% *1,3-diphenyl-2,3-dimethyl-1-phenylpropan-2-ol*, m.p. 61.6-4.5°, yielding  $\text{EtCO}_2\text{Ph}$  and  $\text{BaOII}$  with  $\text{Pb(OAc)}_4$ . G. M. Korsakoff

KROPACHEV, V. A.

Temnikova, T. I., Kropachev, V. A. - "Investigation of isomeric transformations of -keto alcohols. IX. Investigation of benzylacetylcarbinol." (p. 813)

SO: Journal of General Chemistry, (Zhurnal Obshchoi Khimii), 1952, Vol. 22, No. 5

YALYAEV V.A.

Chemical Abst.  
Vol. 48 No. 5  
Mar. 10, 1954  
Organic Chemistry

*Isomeric transformations of  $\alpha$ -oxo alcohols. X.  $\alpha$ -Methyl-*  
~~acetylacetoin~~. T. I. Tepnikova and V. A. Yal'yaev  
(A. A. Zhdanov State Univ., Leningrad). *J. Gen. Chem.*  
U.S.S.R. 22, 875-7 (1952) (Engl. translation).—See *C.A.*  
47, 3208s. H. L. H.

1-18-54

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APPROVED FOR RELEASE: 06/14/2000

CIA-RDP86-00513R000826630001-5"

БЕЛЯЕВ, В. А., БУЛГОДАНОВ, В. А., and МИХАЙЛОВ, В. Г.

"Complex formation and chain structure of some diene polymers,"  
a paper presented at the 9th Congress on the Chemistry and Physics of High  
Polymers, 28 Jan-2 Feb 57, Moscow, Polymer Research Inst.

B-3,004,305

~~PROFACHEV, V. A.~~, DOLGOPLOSK, B. A., and DANILOVICH, K. V.

"Stereospecific syntheses with metals and metal organic compounds,"  
a paper presented at the 9th Congress on the Chemistry and Physics of High  
polymers, 28 Jan-2 Feb 57, Moscow, Polymer Research Inst.  
B-3,684,395

KROPACHEV, V. A.

AUTHORS Kropachev, V.A., Dolgoplosk, B.A., Nikolayev, N.I., 20-3-26/59  
TITLE Complex Formation and Chain Structure in the Polymerization of  
Divinyl by Lithium Butyl.  
(Kompleksobrazovaniye i struktura tsperi pri polimerizatsii divinila litiybutilom - Russian)  
PERIODICAL Doklady Akademii Nauk SSSR, 1957, Vol 115, Nr 3, pp 516-517 (U.S.S.R.)  
ABSTRACT In a series of papers it was determined that on the occasion of the catalytic polymerization of monolefines and dienes the chain structure is to a great extent determined by the nature of the catalytic complex which takes part in the polymerization. Thus the catalytic initial complex has an immediate relation to every prolongation of the chain. The isolation of the pure lithium organic compounds is rather difficult. On this occasion also complex mixtures of the oxidation products of the metal-organic compounds are formed besides the latter. It was expedient to study the influence of oxygen in order to explain the influence exercised by the mentioned oxidation products on the chain structure on the occasion of the butadien polymerization. The authors proved that, as the title says, on the occasion of the polymerization the introduction of relatively small oxygen quantities into the system leads to an essential increase of the members 1,2 in the polybutadien at the cost of a reduction of the members 1,4. Similar was the influence of alcohol and carbonic acid. This knowledge is of fundamental interest since it points out the necessity of protecting the system against the penetration of oxygen, if divinyl on the occasion of its polymer synthesis con-

Card 1/2

20-3-26/59

Complex Formation and Chain Structure in the Polymerization  
of Divinyl by Lithium Butyl.

tains a maximum quantity of 1,4 members in the chain. Obviously oxygenated products are developing here which form complexes with lithium-organic compounds. An analogous effect is caused by the dialkylmonosulphides the influence of which was carefully studied by the authors in the absence of oxygen (additions of dimethyl-dipropyl- and di-isopropyl sulphide). The influence of the dialkyl sulphide decreases with the increase of the alkyl radical. The complexes can be represented as  $RMe.S\langle R' R''$  in a general form. Me is the alkaline metal and R, R' and R'' are alkyl radicals. Though also complicated complexes can take part in the polymerization, the influence of the complex-forming additions on the chain structure can be represented according to Ziegler as a consequent metal-organic synthesis, beginning with polymerization. (scheme is given). Since the complex-forming addition is immediately connected with the metal of the metal-organic compound it exercises an influence on the character of the carbon-metal-binding in the course of the entire process of chain formation and thus influences the structure of the polymer.

Card 2/2

There are 2 tables and 1 Slavic reference.

ASSOCIATION Institute for Highmolecular Compounds of the A.N. of the U.S.S.R.  
(Institut vysokomolekulovnykh soedineniy Akademii nauk SSSR)  
PRESENTED By Kargin, V. A., Academician, February 27, 1957  
SUBMITTED January 29, 1957  
AVAILABILITY Library of Congress

7/30-9-17/51

AUTHOR: Kropachev, V. A., Candidate of Chemical Sciences

TITLE: Discussion in the Faraday Society (Diskussiya v Faradeyeveskom obshchestve)

PERIODICAL: Vestnik Akademii nauk SSSR, 1959, Nr 9, pp. 80-81 (USSR)

ABSTRACT: The discussion took place in Leeds from April 15 - 17. It dealt with the configuration and interaction of macromolecules and liquid crystals. The majority of the reports was given by British scientists. The report of S. Ye. Bresler (USSR) dealt with the problem of the quantitative investigation of the 4 structural types of globular proteins and with the forces manifesting themselves in them. He presented experimental values concerning the isotope exchange of the proteins with water and the interaction of the amino acids, proteins and peptides with ion exchange resins. His report was animatedly discussed.

Card 1/1

KROPACHEV, V.A.; DOLGOPOLSK, B.A.; GELLER, N.M.; ROZINOVYER, Ya.M.

Use of organoaluminum compounds as catalysts for the polymerization of 3,3'-bis(chloromethyl)oxacyclobutane and isobutylene.  
Vysokom.soc. 1 no.12:1844-1847 D '59. (MIRA 13:5)

1. Institut vysokomolekulyarnykh soyedineniy AN SSSR.  
(Aluminum organic compounds) (Oxetane)

*Handwritten text: 81934*

81934

S/062/60/000/06/05/011  
B020/B061

5.3700C

AUTHORS: Kropachev, V. A., Dolgoplosk, B. A., Geller, N. M.,  
Zelenina, M. N.

TITLE: Reactions Between Organo-metallic Compounds and Heavy Metal Salts, II. Interaction of Lithium-ethyl With Cobalt and Titanium Halides

PERIODICAL: Izvestiya Akademii nauk SSSR. Otdeleniya khimicheskikh nauk, 1960, No. 6, pp. 1044 - 1048

TEXT: The reaction of ethyl-lithium with titanium tetrachloride and cobalt chloride is examined here at 20° in hydrocarbon solvents and in the presence of unsaturated hydrocarbons as free-radical acceptors. In the case of radical stages, the said reaction cannot lead to the formation of ethane and ethylene. Similarly, the reaction of organo-magnesium compounds with metal halides was examined earlier (Ref. 12). All reactions were carried out in solutions (in benzene, metaxylol) at 20°. In connection with the fact that α-methylstyrene polymerizes under reaction conditions on the *X*

Card 1/3

Reactions Between Organo-metalllic Compounds and Heavy Metal Salts. II. Interaction of Lithium-ethyl With Cobalt and Titanium Halides

81934

S/062/60/000/06/05/011  
B020/B061

action of the ethyl-lithium and  $TiCl_4$ , the  $\alpha$ -methylstyrene was gradually introduced to the reaction mixture, thus maintaining a sufficient quantity of free olefin in the mixture at all times. The products of the reaction of ethyl-lithium with cobalt chloride (Table 1) and with  $TiCl_4$  (Table 2) at 20° are given. On the reaction of ethyl-lithium with cobalt chloride, equimolar quantities of ethane and ethylene are liberated, whilst only ethane is liberated when reacting with  $TiCl_4$ , the ethylene being polymerized.

The introduction of acceptors in no case affected the composition of the reaction products. The performance of the experiments is exactly described in the experimental part (Fig. 1, reaction vessel with mixer), and hints are given for carrying out the reaction of ethyl-lithium with  $TiCl_4$  and cobalt chloride. The results obtained show that the formation of ethane and ethylene is not connected with radical interstages. There are 1 figure, 2 tables, and 13 references: 4 Soviet, 7 USA, and 2 German.

Card 2/3

X

81934

Reactions Between Organo-metallic Compounds and S/062/60/000/06/05/011  
Heavy Metal Salts. II. Interaction of Lithium- B020/B061  
ethyl With Cobalt and Titanium Halides

ASSOCIATION: Institut vysokomolekulyarnykh soyedineniy Akademii nauk  
SSSR (Institute of High-molecular Compounds of the Academy  
of Sciences USSR)

SUBMITTED: December 1, 1958

X

Card 3/3

87168

S/062/60/000/012/007/020  
B013/B055

5 3770

AUTHORS: Zgonnik, V. N., Kropachev, V. A., Nikolayev, N. I.,  
and Dolgoplosk, B. A.

TITLE: Reactions of Organometallic Compounds With Heavy-metal  
Salts. IV. Interaction of Ethyl Lithium With Titanium  
Trichloride

PERIODICAL: Izvestiya Akademii nauk SSSR. Otdeleniye khimicheskikh nauk,  
1960, No. 12, pp. 2157-2161

TEXT: The present work is a study of the reaction of ethyl lithium with  
the purple, crystalline  $\alpha$ -modification of titanium trichloride in hydro-  
carbon mediums. The reaction was performed at 0, 20, 55, and  $100^{\circ}\text{C}$  applying  
various molar ratios of ethyl lithium and titanium trichloride. The yields  
and compositions of the gaseous reaction products are summarized in Table 1.  
It can be seen that the ratio of the reactants has a stronger influence on  
the composition of the gases than the reaction temperature. The yields of  
gaseous reaction products increase with increasing temperature and at  $100^{\circ}\text{C}$   
approach the theoretical amount with regard to the initial ethyl lithium.

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87168

Reactions of Organometallic Compounds With  
Heavy-metal Salts. IV. Interaction of Ethyl  
Lithium With Titanium Trichloride

S/062/60/000/012/007/020  
F013/B055

Even at low temperatures, gas formation occurs within a few minutes. Gas yields are about 10-20% at low temperatures (Table 1) and the gas contains mainly ethane. This might give rise to the conclusion that simultaneously formed ethylene is partly polymerized. It was shown, however, that ethylene polymerization does not occur. At temperatures around 100°C and above the possibility of thermal decomposition (Ref. 9) must be taken into consideration. The reaction of ethyl lithium with titanium trichloride is practically instantaneous at 100°C, whereas the thermal decomposition under the same conditions reaches an extent of 25% only after 14 h. The composition of the gases obtained in these two cases is shown in Table 2 for which two characteristic experiments were selected. Hydrolysis of the reaction products of ethyl lithium and titanium trichloride yielded large quantities of hydrogen which in some cases by far exceeded the stoichiometric amount. The precipitate dissolves during hydrolysis. This indicates that the reaction products contain no metallic titanium. Lithium hydride, formed during the decomposition of ethyl lithium according to the scheme  $\text{LiC}_2\text{H}_5 \rightarrow \text{LiH} + \text{CH}_2 = \text{CH}_2$ , may constitute another source of hydrogen. This decomposition actually occurs above 100°C. As has been mentioned, the decomposition of ethyl lithium

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67168  
Reactions of Organometallic Compounds With Heavy-metal Salts. IV. Interaction of Ethyl Lithium With Titanium Trichloride

5062/60/000/012/007/020  
R013/B055

proceeds much more rapidly and at lower temperatures in the presence of titanium trichloride. At 55-100°C this reaction is very rapid. In experiments at these temperatures, 1 mole titanium trichloride caused decomposition of up to 7 mole ethyl lithium (Table 3). The results obtained show that titanium halides catalyze the decomposition of ethyl lithium to ethylene and lithium hydride. There are 1 figure, 3 tables, and 11 references: 2 Soviet, 3 German, and 7 US. X

ASSOCIATION: Institut vysokomolekulyarnykh soyedineniy Akademii nauk SSSR  
(Institute of High-molecular Compounds of the Academy of Sciences USSR)

SUBMITTED: July 11, 1959

Card 3/3

ZGONNIK, V.N.; DOLGOPLOSK, B.A.; NIKOLAYEV, N.I.; KROPACHEV, V.A.

Polymerization under the influence of homogeneous catalytic  
"cobalt" systems. Vysokom. soed. 4 no.7:1000-1004 Jl '62.

(MIRA 15:7)

1. Institut vysokomolekulyarnykh soyedineniy AN SSSR.  
(Polymerization) (Cobalt compounds)

15,920

40387  
8/020/62/145/006/011/015  
B106/B144

AUTHORS: Zgonnik, V. N., Dolgoplosk, B. A., Corresponding Member AS  
USSR, Kropachev, V. A., and Nikolayev, N. I.

TITLE: Some regularities observed in the polymerization of butadiene  
under the action of catalytic systems containing cobalt

PERIODICAL: Akademiya nauk SSSR. Doklady, v. 145, no. 6, 1962, 1285-1287

TEXT: The authors studied the polymerization of butadiene under the action of a homogeneous catalytic system consisting of a cobalt chloride-pyridine complex and diisobutyl aluminum chloride, using a technique already described (Vysokomolek. soyed., 4, no. 7 (1962)). With benzene as a solvent, temperatures between 5 and 50°C, and with contents of:  
1.2 moles/l butadiene,  $2.1 \cdot 10^{-5}$  moles/l  $\text{CoCl}_2\text{Py}_2$ ,  $1.5 \cdot 10^{-2}$  moles/l  $\text{Al}(\text{iso-C}_4\text{H}_9)_2\text{Cl}$ , the yield of polymer was ~ 40%. Table 1 gives the mean values from several determinations of the polymerization rate and molecular weight of polymer. These correspond with a total activation energy of 8.2 kcal/mole. The polymerization rate at 20°C is directly  
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B106/B144

Some regularities observed in ...

proportional to the monomer concentration between 6 and 23 moles/l butadiene on the one hand, and to the  $\text{CoCl}_2\text{Py}_2$  concentration between  $9 \cdot 10^{-6}$  and  $7.6 \cdot 10^{-5}$  moles/l on the other hand. The molecular weight of the polymer is directly proportional to the monomer concentration. Experiments showed that many molecules of polymer were formed for each molecule of  $\text{CoCl}_2\text{Py}_2$ . Chain rupture was found to be attended by a regeneration of the active centers. The distribution curves of the molecular weights of polybutadiene samples with a conversion < 10 % showed that the molecular weight increases and the distribution width decreases ( $\bar{M}_w/\bar{M}_n$  changes from 1.05 to 1.5) when the  $\text{CoCl}_2\text{Py}_2$  content decreases. When using the catalytic system  $\text{CoCl}_2\text{Py}_2\text{-Al}(\text{iso-C}_4\text{H}_9)_2\text{Cl}$ , the distribution width of the molecular weight was found to increase as polymerization progresses. There are 4 figures and 3 tables. The English-language references are: G. J. Natta, Pol. Sci., 48, 150, 221 (1960); M. Gippin, Rubb. Age, 89, 802 (1961).

Card 2/3

Some regularities observed in ...

S/020/62/145/006/011/015  
B106/B144

ASSOCIATION: Institut vysokomolekulyarnykh soyedineniy Akademii nauk SSSR  
(Institute of High-molecular Compounds of the Academy of Sciences USSR)

SUBMITTED: May 7, 1962

Table 1. Legend: (1) Temperature, °C; (2) moles/cm<sup>3</sup>.sec.

Table 1

T·P <sub>2</sub> ① °C	W·10 <sup>-3</sup> moles/cm <sup>3</sup> .sec ②	M <sub>n</sub> ·10 <sup>-3</sup>
5	0,78	306
20	2,53	150
35	5,02	115
50	6,80	82

Card 3/3

L 12433-63

RM/WW

ACCESSION NR: AP3001148

EPR/EWP(j)/EPF(c)/EWT(m)/BDS ASD Ps-l<sub>4</sub>/Pc-l<sub>4</sub>/Pr-l<sub>4</sub>

S/0190/63/005/006/0811/0815

74

73

AUTHOR: Nikolayev, N. I.; Geller, N. M.; Dolgoplosk, B. A., Zgonnik, V. N.;  
Kopachev, V. A.TITLE: Polymerization of isoprene and butadiene by insoluble organo-lithium compoundsSOURCE: Vysokomolekulyarnye soyedineniya, v. 5, no. 6, 1963, 811-815

TOPIC TAGS: polymerization, isoprene, butadiene, methyllithium amide, dialkyl-lithium amide

ABSTRACT: Organic lithium compounds insoluble in hydrocarbons and monomers were selected so as to allow the polymerization process to proceed gradually, with a chance of formation of longer chains. Such lithium compounds could also be of higher purity to eliminate side reactions with the impurities. Polymerization of isoprene and butadiene in benzene or petroleum ether solutions was conducted in sealed ampules by standard methods, using methyllithiumamide and dialkyl-lithiumamide as catalysts. The obtained polymers were precipitated by ethanol and dried at 20C, and their viscosity and molecular weight determined. It was shown that methyllithiumamide leads to the formation of polyisoprene with 93-96% of 1,4-chains of 500 000--2 500 000 molecular weight, while dialkylolithiumamide

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ACCESSION NR: AP3001148

produces a polyisoprene rich in 3,4-chains, the distribution of cis- and trans-forms being nearly equal. Under similar conditions both catalysts produced polybutadienes containing 85-89% of 1,4-units in their chains, with 40-54% of them in transconfiguration. Orig. art. has: 2 formulas and 2 tables.

ASSOCIATION: Institut vy\*skomolekulyarny\*kh soyedineniy AN SSSR (Institute of High-Molecular Compounds, Academy of Sciences SSSR)

SUBMITTED: 09Nov61

DATE ACQ: 01Jul63

ENCL: 00

SUB CODE: 00

NO PEF SOV: 003

OTHER: 003

Card 2/2

L180?1-63

EWP(j)/EPF(c)/EMT(m)/EDS ASD Pe-h/Pr-h K4/NW/MAT

ACCESSION NR: AF3003788

S/0190/63/005/007/0994/0996

AUTHORS: Kropachev, V. A.; Alferova, L. V.; Dolgopolosk, B. A.

TITLE: Polymerization of 3,3'-bis-(chloromethyl)oxacyclotutane in polar solvents

SOURCE: Vyssokomoloskulyarnyye soyedineniya, v. 5, no. 7, 1963, 994-996

TOPIC TAGS: polymerization, polar solvent, polymerization kinetics, ethyl chloride

ABSTRACT: In view of the ionic character of the polymerization process the authors investigated the effect of polar solvents on the polymerization kinetics and the molecular weight of the polymer derived from 3,3'-bis-(chloromethyl)oxacyclobutane (CNOAB), using as catalyst a 25% solution of triethylaluminum in xylene. The experiments were conducted in 50 ml ampules into which the catalyst and the CNOAB monomer were introduced, followed after 3-5 minutes at 20C by either phenyl chloride or ethyl chloride as solvents, after which the ampule was placed in a thermostat at 50-100C for a period of 10-120 min. When phenyl chloride was used the kinetics of the process were determined ciliatometrically because of the solubility of the polymer therein, while the yield of the polymer was used to

Card 1/2

L 18021-63

ACCESSION NR: AP0003788

measure the kinetics in the ethyl chloride medium. It was found that in the ethyl chloride medium the polymerization rate depended directly on the amount of the catalyst, with an optimum yield of 85-95% at 0.3-0.5% of triethylaluminum, while the polymer's viscosity was adversely affected by higher concentrations of the catalyst. The observation was also made that the polymerization rate was much enhanced by allowing the CMOAB monomer to interact with the catalyst for 3-5 min preceding the addition of ethyl chloride. Phenyl chloride was found unsatisfactory, due to solidification of the obtained polymer. Ethyl chloride proved superior as a solvent to toluene in both the reaction rate and the viscosity of the obtained polymer. Orig. art. has: 3 charts.

ASSOCIATION: Institut vysokomolekulyarnikh soedineniy AN SSSR (Institute of High-polymer Compounds, Academy of Sciences, USSR)

SUBMITTED: 11Dec61 DATE ACQ: 08Aug63 ENCL: 00  
SUB CODE: CH NO REF Sov: 001 OTHER: 000

Card 2/2

ПОДЛИН. В.Н.; БАБИЧЕВ, В.А.; ИВОЛАЕВ, Н.И.; ЧЕРНЯЕВ, В.А.

Effect of water on the polymerization of butadiene on homogeneous  
"cobalt" catalysts. Vysokomol. soed. 7 no.2:308-311 F '65.

(MIRA 18:3)

1. Institut vysokomolekulyarnykh soyedineniy AN SSSR.

"APPROVED FOR RELEASE: 06/14/2000

CIA-RDP86-00513R000826630001-5

APPROVED FOR RELEASE: 06/14/2000

CIA-RDP86-00513R000826630001-5"

"APPROVED FOR RELEASE: 06/14/2000

CIA-RDP86-00513R000826630001-5

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000826630001-5"

Khripachov, V.A., kand. med. nauk

Gas metabolism in erythremia and symptomatic erythrocytosis.  
Sov. med. 28 no.11:71-74 N '65. (MIRA 18:12)

1. Kafedra fakul'tetskoy terapii (zav. - prof. M.Ye. Kurnayeva)  
Yaroslavskogo meditsinskogo instituta.

L 2161-6 DIA(j)/DPF(m)/EPF(c)/INP(j)/T WV/RM  
ACC NR: AF5017769

SOURCE CODE: UR/0080/65/038/007/1425/1427

AUTHOR: Kropachev, V. A.

ORG: none

TITLE: Sergey Nikolayevich Ushakov

SOURCE: Zhurnal prikladnoy khimii, v. 38, no. 7, 1965, 1425-1427

TOPIC TAGS: chemical personnel, macromolecular chemistry, polymer, synthetic material

ABSTRACT: The prominent Soviet scientist Sergey Nikolayevich Ushakov died on 16 September 1964. His work in the field of the chemistry and technology of plastics and polymers to a considerable degree determined the course of development of the plastics industry in the USSR from 1924 to 1950.

During his career, Ushakov investigated phenol-aldehyde condensation, substitutes for phenol and formaldehyde (lignin, pentosans, and others); the synthesis of alcohol- and oil-soluble resins and of cellulose ethers, synthesis and polymerization of vinyl esters, preparation of poly (vinyl alcohol), its acetals and other derivatives, and the synthesis of fluorine-containing monomers and polymers, cyclooctatetrene and

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ACC NR: AP5017769

its polymers. He was credited with being the first to synthesize vinylalkysilanes, and also the first to prepare graft polymers.

Ushakov and his coworkers developed many processes which went on stream at plants in the USSR. These processes include the preparation of various types of laquers, high-strength asbestos-filled resins (for aircraft brake linings and other purposes), several polymers used for aircraft bullet-proof glass and electrical insulating materials, organic glass, and fluorocarbon plastics. His discovery, in 1958, that physiologically active substances retain their active properties when they combine with polymers was of particular importance. Based on this discovery, many laboratories and scientific establishments of the Soviet Union are now preparing and studying new long-acting medicinal polymer compounds.

Ushakov graduated from Petrograd Polytechnical Institute in 1921. After holding several positions in industry, he headed the Central Plastics Laboratory (1928-1931) and three large scientific research institutes: Leningrad Plastics Institute (1931-1941), Scientific Research Institute of Polymerization Plastics (1945-1949), and the Institute of

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Macromolecular Compounds, AS USSR (1948-1953). He was a professor at the Leningrad Polytechnical Institute, and headed the chair of plastics technology at the Leningrad Technological Institute for more than 30 years.

Of the 110 inventions which Ushakov took part in developing, a series of investigations concerning a new type of copolymer from crotonic derivatives is of particular note. These copolymers possess special properties and are now about to go into production.

Ushakov helped start and was permanent editor of *Plasticheskiye massy* and of *Plastmassy*. He had more than 200 publications, 75 of which were published during the past ten years. His awards include: three Orders of Lenin, Order of the Red Badge of Labor, Order of the Red Star, Order of Merit, two State Prizes of the USSR, special prize of the Council of Ministers USSR, medals of the USSR, and the rank of honorary worker of science and technology of the RSFSR. He was made a Corresponding Member of the Academy of Sciences USSR in 1943. He was also a delegate to several international conventions and conferences. *[FSB, v. 1, no. 17]*

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ACC NR: AP5017769

SUB CODE: MT, GC / SUBM DATE: none 07/03

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APPROVED FOR RELEASE: 06/14/2000

CIA-RDP86-00513R000826630001-5"

ACC-NR: AP7000336

SOURCE CODE: UR/0413/66/000/022/0094/0094

INVENTOR: Gorin, Yu. A.; Charakaya, K. N.; Rodina, E. I.; Kropachey, V. A.; Alferova, L. V.; Kuren'gina, T. N.

ORG: none

TITLE: Preparative method for elastic tetrahydrofuran copolymers. Class 39, No. 188670 [announced by the All-Union Sceintific Research Institute of Synthetic Rubber im. Akademician S. V. Lebedev (Vsesoyuznyy nauchno-issledovatel'skiy institut sinteticheskogo kauchuka); Institute of Macromolecular Compounds AN SSSR (Institut vysokomolekulyarnykh soyedineniy AN SSSR)]

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 22, 1966, 94

TOPIC TAGS: elastic copolymer, bulk copolymerization, tetrahydrofuran copolymer, ... readily curable copolymer, Copolymer, Copolymerization

ABSTRACT: An Author Certificate has been issued for a method of preparing elastic copolymers of tetrahydrofuran with oxacyclobutane or organic oxides by bulk co-polymerization in the presence of diethyl zinc hydrolyzates or of a system, consisting of aluminumalkyl hydrolyzates and oxacyclobutane derivatives. To produce vulcanization, the method provides for the copolymerization of the above-mentioned monomers in the presence of unsaturated epoxy compounds (e.g., alkyl-1-propanol or butadiene epoxide) as the third monomer. 5107

SUB CODE: 11, 07/ SUBM DATE: 05Jul65/ ATD PRESS:

1/1

UDC: 678.83:66. .062.785

KROPACHEV, V.P.

Nonlinear singular integral equations. Trudy KAI 30:115-133 '55.  
(Integral equations) (MIRA 10:6)

BRYUNETKIN, M.G.; GISS, A.N.; KICHA, I.N.; SHOTIN, V.S.; KROPACHEV, V.F.

Using ground powders in the repair of open-hearth furnace hearth bottoms. Metallurg 8 no.4:27-28 Ap '63. (MIRA 16:3)  
(Open-hearth furnaces—Maintenance and repair)  
(Refractory materials)

KROPACHEV, V.P.

The VP701 oil-filled track switches. Mashinostroitel'  
no. 5:21 My '64.  
(MIRA 17:7)

in: GVEU, Aleksey Iosifovich; VOLKOV, V.G., retsenzent; V. Ya., retsenzent; ZAKHAROV, A.I., retsenzent; KOPALEV, V.I., retsenzent; PASTUKHOV, N.V., retsenzent; PEREGUDOV, V.V., retsenzent; PONOMAREV, V.A., retsenzent; RUDOV, A.M., retsenzent; KHROSTUNSKIY, Ye.A., retsenzent; SAIKHOV, A.A., inzh., retsenzent

[Contact networks in strip mines] Kontaktchnaya set' na kar'erakh. Moskva, Nedra, 1964. 207 p. (MIR: 18:2)

1. Inzhenerno-tekhnicheskiye rabochniki Korkinskogo trubno-ugol'nykh predpriyatiy (for all except Kirov).

Ca

10

Preparation of  $\alpha$ -diethylaminoethylbutanol. S. I. Sivrikaya, A. A. Kryzhanova, and I. Lipovich. Khim. Farm. Promst. 1954, No. 8, 13-15.—The amino alc. is obtained from Et  $\alpha$ -ethylacrylate through the following steps:  $\text{EtCH}(\text{CH}_2\text{CH}_2\text{CO}_2\text{Et} + \text{SOCl}_2 \rightarrow \text{EtCH}(\text{CH}_2\text{CH}_2\text{CO}_2\text{Et} + \text{NH}_3 \rightarrow \text{EtCH}(\text{CH}_2\text{CH}_2\text{NH}_2\text{CO}_2\text{Et} + \text{H}_2 \rightarrow \text{EtCH}(\text{CH}_2\text{CH}_2\text{NH}_2\text{CH}_2\text{OH}$ . The butanol and butyl chloride are discussed.

I. Naumovich

## APPENDIX B METALLURICAL LITERATURE CLASSIFICATION

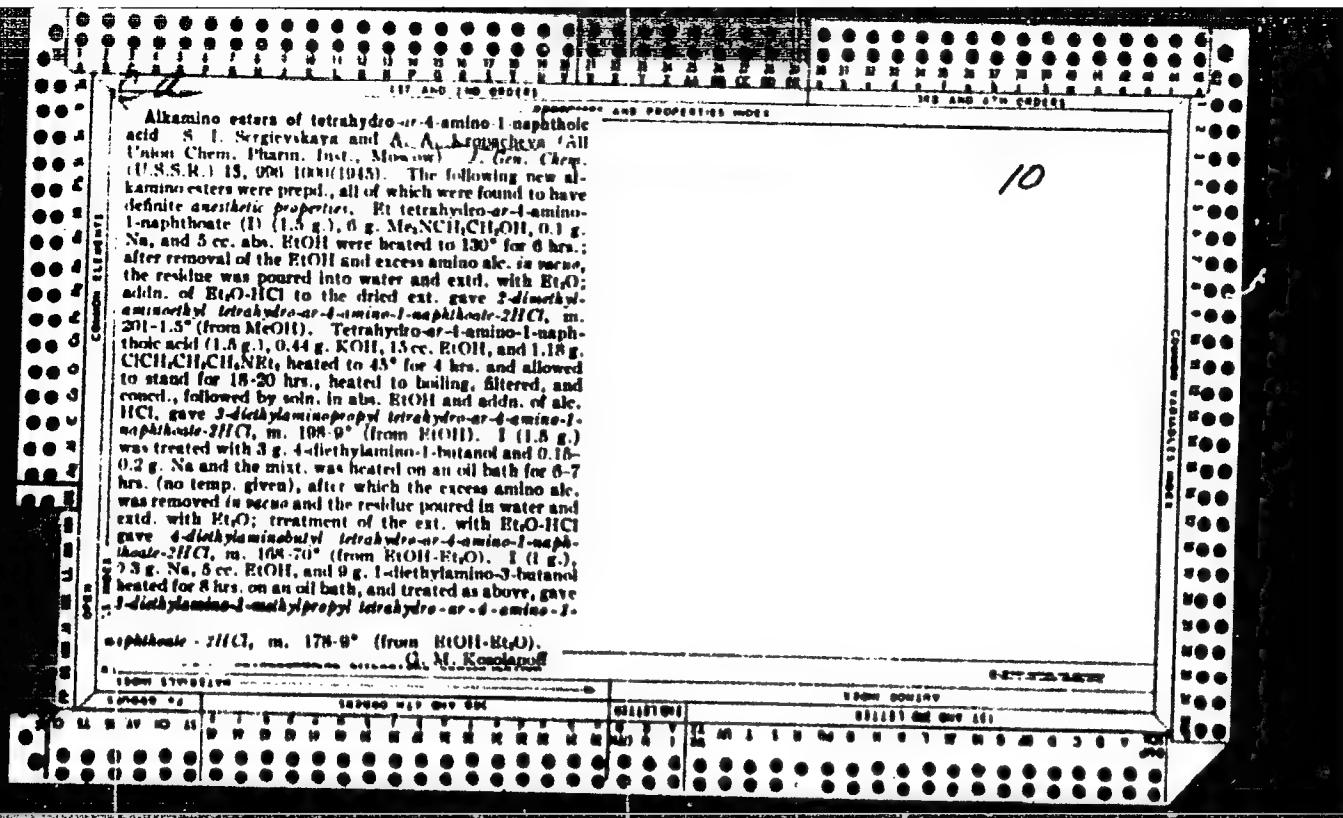
SEARCHED	INDEXED	SEARCHED	INDEXED
SEARCHED	INDEXED	SEARCHED	INDEXED

SEARCHED INDEXED

KIRPACHEVA, A. A.

"Anesthetic Substances of the Naphthalene Series"  
Part III. "The Esters of -Thionaphthoic and  
4-amino-1-Thionaphthoic Acid" Zhur. Obshch.  
Khim., 10, No. 19-20, 1940. All-Union Scientific-  
Research Chemico-Pharmaceutical Institute imeni Sergo  
Ordzhonikidze, Moscow  
Received 8 May 1940.

Report U-1612, 3 Jan. 1952



KFCFACHENIA A. A.

PL 194763

USSR/Chemistry - Pharmaceuticals

Dec 51

"Synthesis of Ephedrine-Like Aminoalcohols,"  
A. A. Kropacheva, S. I. Sergiyevskaya, All-Union  
Sci Res Chemicophar Inst imeni S. Ordzhonikidze

"Zhur Obshch Khim" Vol XXI, No 12, pp 2179-2184

Describes synthesis and properties of 1'-(tetrahydronaphthyl-2)-2'-methylaminopropanol and other  
amino alcs of tetrahydronaphthalene series and  
synthesis of 1'-(naphthyl-2)-2'-(methylamino)-  
propanol.

194763

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CIA-RDP86-00513R000826630001-5"

1. SEMENOVSKAYA, S. I., KONACHEVA, A. A.

2. USSR (600)

4. Ketones

7. Condensation of ar-1-methoxytetrahydronaphthalene with fatty acid chlorides.  
Zhur. ob. khim. 24 no. 3, 1953

9. Monthly List of Russian Accessions, Library of Congress, June 1953, Unclassified.

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